410.01 General

Basic design level (B) preserves pavement structures, extends pavement service life, and maintains safe operations of the highway. The basic design level includes restoring the roadway for safe operations and, where needed, may include safety enhancement. Flexibility is provided so that other conditions can be enhanced while remaining within the scope of pavement preservation work.

The required safety items of work listed below may be programmed under a separate project from the paving project as long as there is some benefit to the delay, the safety features remain functional, and the work is completed within two years after the completion of the paving project. If some of the required items are separated from the paving project, maintain a separate documentation file that addresses the separation of work during the two-year time period.

For bituminous surface treatment projects on non-NHS routes, the separation of required safety items is not limited to the two years stated above. The safety work can be accomplished separately using a corridor-by-corridor approach.

410.02 Required Basic Safety Items of Work

For basic design level (B), the following items of work are required:

- Install and replace delineation in accordance with Chapter 830
- Install and replace rumble strips in accordance with the matrices and Chapter 700
- Adjust existing features that are affected by resurfacing, such as monuments, catch basins, and access covers
- Adjust guardrail height in accordance with Chapter 710
- Replace deficient signing, as needed, using current standards. This does not include replacement of sign bridges or cantilever supports
- Relocate, protect, or provide breakaway features for sign supports, luminaires, and WSDOT electrical service poles inside the design clear zone
- Restore sight distance at public road intersections and the inside of curves through low cost measures if they are available such as removal or relocation of signs and other obstructions, and cutting of vegetative matter
- Upgrade nonstandard bridge rail in accordance with the matrices and Chapter 710
- Upgrade barrier terminals and bridge end protection, including transitions, in accordance with Chapter 710
- Restore the cross slope to 1.5 percent when the existing cross slope is flatter than 1.5 percent and, in the engineer's judgment, the steeper slope is needed to solve highway runoff problems in areas of intense rainfall

410.03 Minor Safety and Minor Preservation Work

Consider the following items, where appropriate, within the limits of a pavement preservation project:

- Spot safety enhancements. These are modifications to isolated roadway or roadside features that, in the engineer's judgment, reduce potential accident frequency or severity
- When recommended by the region Traffic Engineer, additional or improved channelization to address intersection related accident concerns, where sufficient pavement width and structural adequacy exist or can be obtained. With justification, channelization improvements may be implemented, with lane and shoulder widths no less than the

design criteria specified in the "Rechannelize Existing Pavement" projects presented in Chapter 340. Consider the impacts to all roadways users. Consider illumination of these improvements. Document decisions when full illumination is not provided, including an analysis of the frequency and severity of nighttime accidents.

- Roadside safety hardware (such as guardrail, signposts, impact attenuators)
- Addressing Location 1 Utility Objects in accordance with the *Utilities Accommodation Policy*, M 22-86

Consider the following items when restoration, replacement, or completion is necessary to assure that an existing system can function as intended:

- Right of way fencing
- Drainage
- Illumination
- Electrical
- Pedestrian and bicycle use

Examples of the above include, but are not limited to, the following: installing short sections of fence needed to control access, replacing grates that are a hazard to bicycles, upgrading electrical system components that require excessive maintenance, and beveling culverts.